

WEB DESIGN

Web Design is a course that provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Instructional strategies should include peer teaching, collaborative instruction, project-based learning activities and school community projects.

- DOE Code: 4574
- Recommended Grade Level: Grade 11- 12
- Recommended Prerequisites: IT Essentials or Introduction to Communications
- Credits: 1 credit per semester, maximum of 2 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- This course is aligned with postsecondary courses for Dual Credit:
 - Ivy Tech
 - VISC 110 Web Design I
 - Vincennes University
 - COMP 107 Web Page Design
 - COMP 113 Advanced Web Page Design

Dual Credit

This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

Application of Content and Multiple Hour Offerings

Intensive laboratory applications are a component of this course and may be either school based or work based or a combination of the two. Work-based learning experiences should be in a closely related industry setting. Instructors shall have a standards-based training plan for students participating in work-based learning experiences. **When a course is offered for multiple hours per semester, the amount of laboratory application or work-based learning needs to be increased proportionally.**

Career and Technical Student Organizations (CTSOs)

Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education programs. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students should be encouraged to participate in Business Professional of America, DECA, or Future Business Leaders of America. the CTSO for this area.

Content Standards

Domain – Introduction to the Internet

Core Standard 1 Students assess internet tools used to access information for base knowledge of internet functions.

Standards

- WD-1.1 Demonstrate a basic knowledge of the internet
- WD-1.2 Access information using electronic sources
- WD-1.3 Identify key events in history of the WWW, Internet and Intranet
- WD-1.4 Analyze the affect of the Internet on society
- WD-1.5 Trace the history of Internet communication and commerce

Domain –HTML/XHTML

Core Standard 2 Students integrate knowledge of HTML/XHTML fundamentals to understand the functions of a website.

Standards

- WD-2.1 Create and format a table on an HTML/XHTML document
- WD-2.2 Integrate scripting into HTML/XHTML documents
- WD-2.3 Utilize forms in an HTML/XHTML document
- WD-2.4 Identify and use appropriate HTML/XHTML elements and attribute syntax for semantic web page markup
- WD-2.5 Identify, describe, and explain the differences in HTML/XHTML DOCTYPES
- WD-2.6 Demonstrate knowledge and implementation of CSS through proper syntax and effective use of external, embedded, and in-line style sheets

Domain – Website Development

Core Standard 3 Students produce websites to demonstrate skills of website development

Standards

- WD-3.1 Create a basic template
- WD-3.2 Develop website architecture, prototypes, and user interface specifications
- WD-3.3 Demonstrate knowledge of usability and interface design
- WD-3.4 Link web objects
- WD-3.5 Demonstrate knowledge of content management
- WD-3.6 Construct and maintain web pages using current editing software
- WD-3.7 Construct web pages using standards compliant HTML/XHTML and CSS that successfully pass validation tests
- WD-3.8 Design functional websites for consumer, education, and information based markets
- WD-3.9 Observe organized structure which demonstrates and understanding of correct pathnames for relative and absolute links
- WD-3.10 Implement basic website accessibility markup
- WD-3.11 Recognize file types and file extensions
- WD-3.12 Publish and maintain websites by using FTP to transfer to a server
- WD-3.13 Analyze and optimize graphic files for web delivery

Domain 4 – Design Elements

Core Standard 4 Students integrate elements and principles of design for an aesthetically pleasing and functional website.

Standards

- WB-4.1 Identify and apply effective design solutions based on content

- WB-4.2 Discuss the importance of proper research, brainstorming, and thumbnails
- WB-4.3 Evaluate the aesthetics of web design
- WB-4.4 Given the target audience, the student will be able to show the importance of assessment in the advertising media industry
- WB-4.5 Explain the elements of visual design unique to the commercial art and graphic design
- WB-4.6 List and describe the components of a design
- WB-4.7 Apply brainstorming techniques to develop many possible solutions
- WB-4.8 Explain the human, social and environmental issues that affect the design solutions
- WB-4.9 Analyze ethical issues in choosing design solutions
- WB-4.10 Analyze the effective use of symbols, elements, principles, and media using appropriate terminology
- WB-4.11 Evaluate the effectiveness of elements and principles in other design solutions and use this evaluation toward personal work
- WB-4.12 Create design solutions that use specific elements, principles, and functions to solve problems and communicate ideas